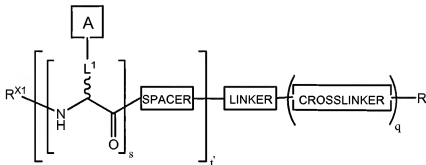


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. **(Currently Amended)** A clustered multi-antigenic construct having the structure:



wherein q is 0 or 1;

each occurrence of s is independently an integer from 1-20;

t is an integer from 2-6;

R^{X1} is hydrogen, alkyl, acyl, aryl, heteroaryl, -alkyl(aryl), -alkyl(heteroaryl), a nitrogen protecting group, an amino acid or a ~~protected~~ protected amino acid;

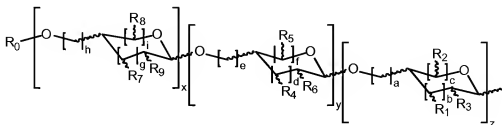
R is hydrogen or an immunogenic carrier;

each occurrence of the spacer is independently a substituted or unsubstituted aliphatic, heteroaliphatic, aryl, heteroaryl or peptidic moiety;

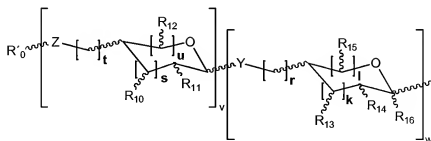
the linker is either a free carboxylic acid, -O-, (carboxamido)alkyl carboxamide, MBS, primary carboxamide, mono- or dialkyl carboxamide, mono- or diarylcarboxamide, linear or branched chain (carboxy)alkyl carboxamide, linear or branched chain (alkoxycarbonyl)alkyl-carboxamide, linear or branched chain (carboxy)arylalkylcarboxamide, linear or branched chain (alkoxycarbonyl)alkylcarboxamide, an oligoester fragment comprising from 2 to about 20 hydroxy acyl residues, a peptidic fragment comprising from 2 to about 20 amino acyl residues, or a linear or branched chain alkyl or aryl carboxylic ester;

each occurrence of L¹ is independently a substituted or unsubstituted aliphatic or heteroaliphatic moiety;

each occurrence of A is independently a carbohydrate determinant having the structure:



wherein a, b, c, d, e, f, g, h, i, x, y and z are independently 0, 1, 2 or 3, with the proviso that the x, y and z bracketed structures represent pyranose moieties and the sum of b and c is 2, the sum of d and f is 2, and the sum of g and i is 2, and with the proviso that x, y and z are not simultaneously 0; wherein R₀ is hydrogen, a linear or branched chain alkyl, acyl, arylalkyl or aryl group; wherein each occurrence of R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈ and R₉ is independently hydrogen, OH, ORⁱ, NHRⁱ, NHCORⁱ, F, CH₂OH, CH₂ORⁱ, a substituted or unsubstituted linear or branched chain alkyl, (mono-, di- or tri)hydroxyalkyl, (mono-, di- or tri)acyloxyalkyl, arylalkyl or aryl group; wherein each occurrence of Rⁱ is independently hydrogen, CHO, COORⁱⁱ, or a substituted or unsubstituted linear or branched chain alkyl, acyl, arylalkyl or aryl group or a saccharide moiety having the structure:



wherein Y and Z are independently NH or O; wherein k, l, r, s, t, u, v and w are each independently 0, 1 or 2; with the proviso that the v and w bracketed structures represent furanose or pyranose moieties and the sum of l and k is 2, and the sum of s and u is 2, and with the proviso that v and w are not simultaneously 0; wherein R'₀ is hydrogen, a linear or branched chain alkyl, acyl, arylalkyl or aryl group; wherein each

occurrence of R₁₀, R₁₁, R₁₂, R₁₃, R₁₄ and R₁₅ is independently hydrogen, OH, ORⁱⁱⁱ, NHRⁱⁱⁱ, NHCORⁱⁱⁱ, F, CH₂OH, CH₂ORⁱⁱⁱ, or a substituted or unsubstituted linear or branched chain alkyl, (mono-, di- or tri)hydroxyalkyl, (mono-, di- or tri)acyloxyalkyl, arylalkyl or aryl group; wherein each occurrence of R₁₆ is hydrogen, COOH, COORⁱⁱ, CONHRⁱⁱ, a substituted or unsubstituted linear or branched chain alkyl or aryl group; wherein each occurrence of Rⁱⁱⁱ is hydrogen, CHO, COOR^{iv}, or a substituted or unsubstituted linear or branched chain alkyl, acyl, arylalkyl or aryl group; and wherein each occurrence of Rⁱⁱ and R^{iv} are each independently H, or a substituted or unsubstituted linear or branched chain alkyl, arylalkyl or aryl group;

with the proviso that all occurrences of A on the multi-antigenic glycopeptide are not the same;

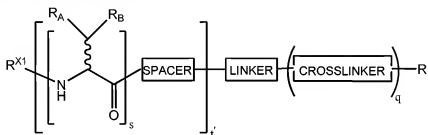
with the limitation that each occurrence of A independently comprises a carbohydrate domain, or ~~truncated or~~ elongated version thereof, that is present on tumor cells.

2. **(Previously Presented)** The construct of claim 1 wherein t' is ≥ 2 and within each bracketed structure s, independently, each occurrence of A is the same.
3. **(Original)** The construct of claim 1, wherein occurrences of A from one bracketed structure s to the next are different.
4. **(Original)** The construct of claim 1, wherein A, for each occurrence, is independently selected from the group consisting of Globo-H, fucosyl GM1, KH-1, glycophorin, N3, Tn, TF, STN, (2,3)ST, 2,6-STn, Gb3, Le^y and Le^x.
5. **(Previously Presented)** The construct of claim 1, wherein each occurrence of L¹ is independently a moiety having the structure $-O(CH_2)_n-$ wherein n is an integer from 1-10; or a natural amino acid side chain, wherein a hydrogen radical of the natural amino acid side chain has been removed and replaced with a carbohydrate moiety A as defined in claim 1.

6. **(Original)** The construct of claim 5, wherein each occurrence of L^1 is independently a moiety having the structure $-O(CH_2)_n-$ wherein n is an integer from 1-10.

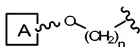
7. **(Original)** The construct of claim 6, wherein n is 3.

8. **(Previously Presented)** The construct of claim 1, having the structure:



wherein each occurrence of R_A is independently H or methyl; and

wherein each occurrence of R_B is independently an alkyl glycoside moiety having the structure:



wherein n is an integer from 0-9;

wherein A, for each occurrence, is independently selected from the group consisting of Globo-H, fucosyl GM1, KH-1, glycophorin, N3, Tn, TF, STN, (2,3)ST, 2,6-STn, Gb3, Le^y and Le^x .

9. **(Original)** The construct of claim 1, wherein R^{X1} is an acyl moiety.

10. **(Original)** The construct of claim 9, wherein R^{X1} is an amino acid residue.

11. **(Original)** The construct of claim 1, wherein the spacer, for each occurrence, is independently a substituted or unsubstituted C_{1-6} alkylidene or C_{2-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO_2 , COCO, $CONR^{Z1}$, $OCONR^{Z1}$, $NR^{Z1}NR^{Z2}$, $NR^{Z1}NR^{Z2}CO$, $NR^{Z1}CO$, $NR^{Z1}CO_2$,

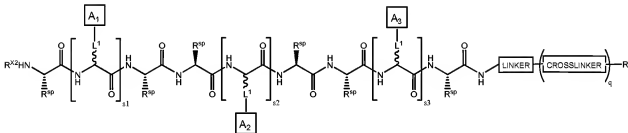
$\text{NR}^{\text{Z1}}\text{CONR}^{\text{Z2}}$, SO , SO_2 , $\text{NR}^{\text{Z1}}\text{SO}_2$, $\text{SO}_2\text{NR}^{\text{Z1}}$, $\text{NR}^{\text{Z1}}\text{SO}_2\text{NR}^{\text{Z2}}$, O , S , or NR^{Z1} ; wherein each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; a peptidyl moiety or a bivalent aryl or heteroaryl moiety.

12. **(Original)** The construct of claim 1, wherein the spacer, for each occurrence, is independently $-(\text{CHR}^{\text{SP}})_n-$, where n is 1-8 and each occurrence of R^{SP} is independently hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, -alkyl(aryl), -alkyl(heteroaryl), $-\text{OR}^{\text{SP1}}$, $-\text{SR}^{\text{SP1}}$ or $-\text{NR}^{\text{SP1}}\text{R}^{\text{SP2}}$ where R^{SP1} and R^{SP2} are independently hydrogen or lower alkyl; a peptidyl moiety comprising one or more α -amino acid residues, or a bivalent aryl moiety having the structure:



13. **(Original)** The construct of claim 1, wherein each occurrence of the spacer is independently a dipeptidyl moiety.

14. **(Previously Presented)** The construct of claim 1, wherein t' is 3, each occurrence of the spacer that is not directly attached to the linker is independently a dipeptidyl moiety and the glycopeptide has the structure:

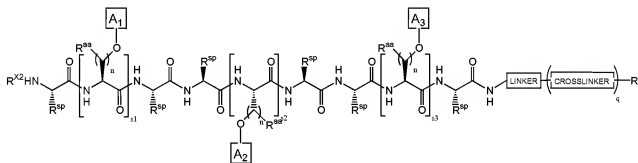


wherein L^1 is as defined in claim 1; wherein R^{SP} is independently hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, -alkyl(aryl), -alkyl(heteroaryl), $-\text{OR}^{\text{SP1}}$, $-\text{SR}^{\text{SP1}}$ or $-\text{NR}^{\text{SP1}}\text{R}^{\text{SP2}}$ where R^{SP1} and R^{SP2} are independently hydrogen or lower alkyl; a peptidyl moiety comprising one or more α -amino acid residues, or a bivalent aryl moiety having the structure:



s1, s2 and s3 are independently integers from 2-5; A₁-A₃ are carbohydrate domains, as defined for A in claim 1, and are different from each other; and R^{X2} is hydrogen, alkyl, acyl, aryl, heteroaryl, -alkyl(aryl), -alkyl(heteroaryl) or a nitrogen protecting group.

15. **(Original)** The construct of claim 14 having the structure:



wherein R, R^{X2}, R^{sp}, s1, s2 and s3 and A₁-A₃ are as defined in claim 14; each occurrence of n is independently an integer from 1-10; and each occurrence of R^{aa} is hydrogen, lower alkyl, aryl, heteroaryl, -alkyl(aryl) or -alkyl(heteroaryl).

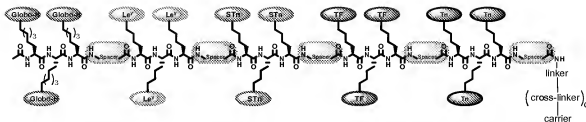
16. **(Original)** The construct of claim 15, wherein each occurrence of n is 1 and each occurrence of R^{aa} is hydrogen or methyl.

17. **(Original)** The construct of claim 15, wherein each occurrence of n is independently an integer from 1-10 and each occurrence of R^{aa} is hydrogen.

18. **(Original)** The construct of claim 15, wherein each occurrence of R^{sp} is independently a natural amino acid side chain.

19. **(Original)** The construct of claim 18, wherein each occurrence of R^{sp} is hydrogen.

20. **(Original)** The construct of claim 1 having the structure:



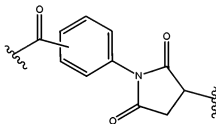
wherein q is 0 or 1; the spacer, for each occurrence, is independently a substituted or unsubstituted C_{1-6} alkylenyl or C_{2-6} alkenylenyl chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO_2 , COCO, $CONR^{Z1}$, $OCONR^{Z1}$, $NR^{Z1}NR^{Z2}$, $NR^{Z1}NR^{Z2}CO$, $NR^{Z1}CO$, $NR^{Z1}CO_2$, $NR^{Z1}CONR^{Z2}$, SO, SO_2 , $NR^{Z1}SO_2$, SO_2NR^{Z1} , $NR^{Z1}SO_2NR^{Z2}$, O, S, or NR^{Z1} ; wherein each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; a peptidyl moiety or a bivalent aryl or heteroaryl moiety; the linker is either a free carboxylic acid, -O-, (carboxamido)alkyl carboxamide, MBS, primary carboxamide, mono- or dialkyl carboxamide, mono- or diarylcarboxamide, linear or branched chain (carboxy)alkyl carboxamide, linear or branched chain (alkoxycarbonyl)alkyl-carboxamide, linear or branched chain (carboxy)arylalkylcarboxamide, linear or branched chain (alkoxycarbonyl)alkylcarboxamide, an oligoester fragment comprising from 2 to about 20 hydroxy acyl residues, a peptidic fragment comprising from 2 to about 20 amino acyl residues, or a linear or branched chain alkyl or aryl carboxylic ester; and the carrier is an immunogenic carrier.

21. **(Original)** The construct of claim 1, 14, 15 or 20, wherein the linker is -O-, - NR_G -, - $NR_G(\text{aliphatic})NR_J$ -, - $NR_G(\text{heteroaliphatic})NR_J$ -, - $(\text{aliphatic})NR_J$ -, - $(\text{heteroaliphatic})NR_J$ -, -O($\text{aliphatic})NR_J$ -, -O($\text{heteroaliphatic})NR_J$ -, - $NR_G(\text{aliphatic})NR_J(C=O)(CR_{H1}R_{I1})_kS$ -, - $NR_G(\text{heteroaliphatic})NR_J(C=O)(CR_{H1}R_{I1})_kS$ -, - $(\text{aliphatic})NR_J(C=O)(CR_{H1}R_{I1})_kS$ -, - $(\text{heteroaliphatic})NR_J(C=O)(CR_{H1}R_{I1})_kS$ -, -O($\text{aliphatic})NR_J(C=O)(CR_{H1}R_{I1})_kS$ -, -O($\text{heteroaliphatic})NR_J(C=O)(CR_{H1}R_{I1})_kS$ -, an oligoester fragment comprising from 2 to about 20 hydroxy acyl residues, a peptidic fragment comprising from 2 to about 20 amino acyl residues, or a linear or branched chain alkyl or aryl carboxylic ester, wherein each occurrence of k is independently 1-5; wherein each occurrence of R_G , R_H , R_I or R_J is independently hydrogen, a linear or branched, substituted or unsubstituted, cyclic or acyclic moiety, or a substituted or

unsubstituted aryl moiety, and wherein each aliphatic or heteroaliphatic moiety is independently substituted or unsubstituted, linear or branched, cyclic or acyclic.

22. **(Original)** The construct of claim 21, wherein the linker is $-O-$, $-NR_G(CR_HR_I)_kNR_J-$, $-NR_G(CR_HR_I)_kNR_J(C=O)(CR_HR_I)_kS-$, $-NR_G-$, $-(CR_HR_I)_kNR_I-$, $-O(CR_HR_I)_kNR_J$, an oligoester fragment comprising from 2 to about 20 hydroxy acyl residues, a peptidic fragment comprising from 2 to about 20 amino acyl residues, or a linear or branched chain alkyl or aryl carboxylic ester, wherein each occurrence of k is independently 1-5, wherein each occurrence of R_G , R_H , R_I or R_J is independently hydrogen, a linear or branched, substituted or unsubstituted, cyclic or acyclic moiety, or a substituted or unsubstituted aryl moiety.

23. **(Original)** The construct of claim 1, 14, 15 or 20, wherein q is 1 and the crosslinker is a fragment having the structure:



whereby said structure is generated upon conjugation of maleimidobenzoic acid N-hydroxy succinimide ester with a linker.

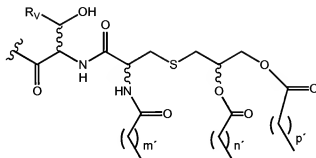
24. **(Original)** The construct of claim 1, 14 or 15, wherein R is hydrogen and q is 0.

25. **(Original)** The construct of claim 1, 14 or 15, wherein R is an immunogenic carrier.

26. **(Original)** The construct of claim 25 wherein the immunogenic carrier is a protein, peptide or lipid.

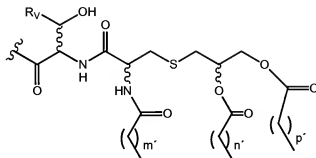
27. **(Original)** The construct of claim 26 wherein the carrier is KLH, polylysine, HSA or BSA.

28. **(Original)** The construct of claim 1, 14 or 15, wherein q is 0 and R is a lipid immunogenic carrier having the structure:



wherein m' , n' and p' are each independently integers between about 8 and 20; and R_V is hydrogen, substituted or unsubstituted linear or branched chain lower alkyl or substituted or unsubstituted phenyl.

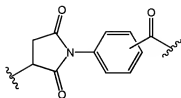
29. **(Original)** The construct of claim 20, wherein q is 0 and the carrier is a lipid immunogenic carrier having the structure:



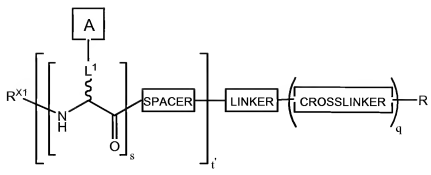
wherein m' , n' and p' are each independently integers between about 8 and 20; and R_V is hydrogen, substituted or unsubstituted linear or branched chain lower alkyl or substituted or unsubstituted phenyl.

30. **(Original)** The construct of claim 28 wherein m' , n' and p' are each 14 and the lipid is tripalmitoyl-S-glycerylcysteinylserine.

31. **(Original)** The construct of claim 1, 14 or 15, wherein each occurrence of A is independently Globo-H, fucosyl GM1, KH-1, glycophorin, Le^y, Le^x, N3, Tn, STN, 2,6-STn, (2,3)ST, Gb3 or TF.
32. **(Previously Presented)** The construct of claim 1, 14, 15 or 20, wherein the linker is a moiety having the structure $-\text{NH}(\text{CH}_2)_t\text{NHC}(=\text{O})(\text{CH}_2)_v\text{S}-$; wherein t'' and v are each independently integers from 1-6.
33. **(Previously Presented)** The construct of claim 1, 14 or 15, wherein n and q are each 0, R is hydrogen and the linker is a moiety having the structure $-\text{NH}(\text{CH}_2)_t\text{NHC}(=\text{O})(\text{CH}_2)_v\text{S}-$ wherein t'' and v are each independently integers from 1-6.
34. **(Previously Presented)** The construct of claim 1, 14 or 15, wherein n is 0, q is 1, R is KLH, the linker is a moiety having the structure $-\text{NH}(\text{CH}_2)_t\text{NHC}(=\text{O})(\text{CH}_2)_v\text{S}-$ wherein t'' and v are each independently integers from 1-6, and the crosslinker is a moiety having the structure:



35. **(Previously Presented)** The construct of claim 32 wherein t'' is 3 and v is 1.
36. **(Currently Amended)** A method for the synthesis of clustered multi-antigenic constructs having the structure:



wherein q is 0 or 1;

each occurrence of s is independently an integer from 2-20;

t' is an integer from 2-6;

R^{X1} is hydrogen, alkyl, acyl, aryl, heteroaryl, -alkyl(aryl), -alkyl(heteroaryl), a nitrogen protecting group, an amino acid or a ~~protected~~ protected amino acid;

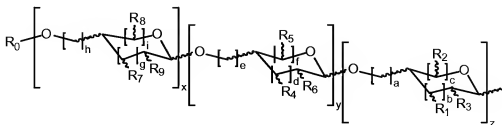
R is hydrogen or an immunogenic carrier;

each occurrence of the spacer is independently a substituted or unsubstituted aliphatic, heteroaliphatic, aryl, heteroaryl or peptidic moiety;

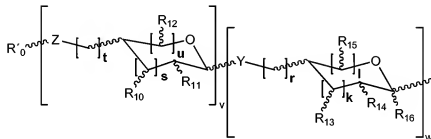
the linker is either a free carboxylic acid, -O-, (carboxamido)alkyl carboxamide, MBS, primary carboxamide, mono- or dialkyl carboxamide, mono- or diarylcarboxamide, linear or branched chain (carboxy)alkyl carboxamide, linear or branched chain (alkoxycarbonyl)alkyl-carboxamide, linear or branched chain (carboxy)arylalkylcarboxamide, linear or branched chain (alkoxycarbonyl)alkylcarboxamide, an oligoester fragment comprising from 2 to about 20 hydroxy acyl residues, a peptidic fragment comprising from 2 to about 20 amino acyl residues, or a linear or branched chain alkyl or aryl carboxylic ester;

each occurrence of L^1 is independently a substituted or unsubstituted aliphatic or heteroaliphatic moiety;

each occurrence of A is independently a carbohydrate domain having the structure:



wherein a, b, c, d, e, f, g, h, i, x, y and z are independently 0, 1, 2 or 3, with the proviso that the x, y and z bracketed structures represent pyranose moieties and the sum of b and c is 2, the sum of d and f is 2, and the sum of g and i is 2, and with the proviso that x, y and z are not simultaneously 0; wherein R_0 is hydrogen, a linear or branched chain alkyl, acyl, arylalkyl or aryl group; wherein each occurrence of R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_7 , R_8 and R_9 is independently hydrogen, OH, OR^i , NHR^i , $NHCOR^i$, F, CH_2OH , CH_2OR^i , a substituted or unsubstituted linear or branched chain alkyl, (mono-, di- or tri)hydroxyalkyl, (mono-, di- or tri)acyloxyalkyl, arylalkyl or aryl group; wherein each occurrence of R^i is independently hydrogen, CHO, $COOR^{ii}$, or a substituted or unsubstituted linear or branched chain alkyl, acyl, arylalkyl or aryl group or a saccharide moiety having the structure:

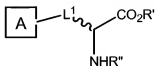


with the limitation that each occurrence of A independently comprises a carbohydrate domain, or ~~truncated or~~ elongated version thereof, that is present on tumor cells;

wherein within each bracketed structure s, independently, each occurrence of A is the same

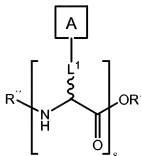
wherein said method comprises steps of:

(a) providing a glycoamino acid having the structure:



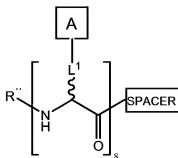
wherein A is a carbohydrate domain as described above;

(b) reacting s occurrences of said glycoamino acid under suitable conditions to generate a glycopeptide having the structure:

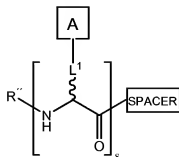


wherein s is an integer from 2-20; each occurrence of A is the same within the bracketed glycopeptide s; R¹ is hydrogen or a protecting group; and R² is hydrogen, a protecting group, an amino acid or a protected amino acid;

(c) reacting said glycopeptide with a spacer under suitable conditions to generate a spacer construct having the structure:

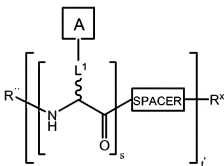


(d) Repeating steps (a) through (c) t'-1 times to generate t'-1 spacer constructs each independently having the structure:



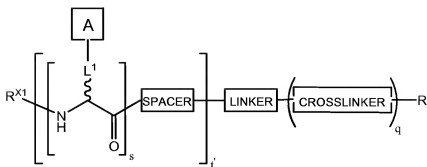
wherein, for each spacer construct, s, L¹, R'' and the spacer moiety may be the same or different; and each spacer construct comprises a different carbohydrate domain A;

(e) Reacting the spacer construct formed in step (c) with the spacer constructs of step (d) under suitable conditions to generate a construct having the structure:



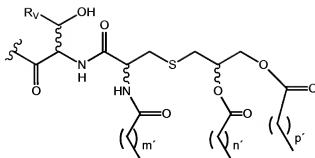
wherein R^x is a protecting group; each occurrence of A is the same within each bracketed structure s; and each bracketed structure s comprises a different carbohydrate domain A; and

(f) Reacting the constructs of step (e) with a linker and optionally a crosslinker and/or an immunogenic carrier under suitable conditions to form the clustered multi-antigenic construct having the structure:



wherein q, linker, crosslinker and R are as defined above.

37. **(Original)** A pharmaceutical composition comprising:
a construct of claim 1, and
a pharmaceutically suitable carrier.
38. **(Original)** The pharmaceutical composition of claim 37, wherein the construct is conjugated to an immunogenic carrier.
39. **(Original)** A pharmaceutical composition comprising:
a pharmaceutically acceptable carrier;
an immunogenic carrier; and
a multi-antigenic clustered construct of claim 1;
whereby the construct has not been conjugated to the immunogenic carrier.
40. **(Original)** The pharmaceutical composition of claim 37 or 39, wherein the immunogenic carrier is bovine serum albumin, polylysine or keyhole limpet hemocyanin.
41. **(Original)** The pharmaceutical composition of claim 37 or 39, wherein the construct does not comprise a crosslinker and the immunogenic carrier is a lipid having the structure:



wherein m' , n' and p' are each independently integers between about 8 and 20; and R_V is hydrogen, substituted or unsubstituted linear or branched chain lower alkyl or substituted or unsubstituted phenyl.

42. **(Original)** The pharmaceutical composition of claim 41, wherein m' , n' and p' are each 14 and the lipid is tripalmitoyl-S-glycerylcysteinyserine.

43. **(Original)** The pharmaceutical composition of claim 37 or 39, further comprising one or more immunological adjuvants.

44. **(Original)** The pharmaceutical composition of claim 43, wherein at least one of said one or more immunological adjuvants is a saponin adjuvant.

45. **(Original)** The pharmaceutical composition of claim 44, wherein the saponin adjuvant is GPI-0100.

46. **(Original)** The pharmaceutical composition of claim 43, wherein at least one of said one or more immunological adjuvants is bacteria or liposomes.

47. **(Original)** The pharmaceutical composition of claim 46, wherein the immunological adjuvant is Salmonella minnesota cells, bacille Calmette-Guerin or QS21.

48. **(Withdrawn)** A method of treating cancer in a subject suffering therefrom comprising:

administering to a subject a therapeutically effective amount of a clustered multi-antigenic construct of claim 1,
and a pharmaceutically suitable carrier.

49. **(Withdrawn)** The method of claim 48, wherein the construct is conjugated to an immunogenic carrier.

50. **(Withdrawn)** The method of claim 48, wherein the construct has not been conjugated to a carrier, and the method further comprises administering an immunogenic carrier.

51. **(Withdrawn)** The method of claim 48, wherein said method comprises preventing the recurrence of cancer in a subject.

52. **(Withdrawn)** The method of claim 48 or 51, wherein the cancer is a solid tumor.

53. **(Withdrawn)** The method of claim 48 or 51, wherein the subject is in clinical remission, or where the subject has been treated by surgery, has limited unresected disease.

54. **(Withdrawn)** A method of inducing antibodies in a subject, wherein the antibodies are capable of specifically binding with tumor cells, which comprises administering to the subject an amount of a clustered multi-antigenic construct of claim 1 effective to induce the antibodies.

55. **(Withdrawn)** The method of claim 54, wherein the glycopeptide is conjugated to an immunogenic carrier.

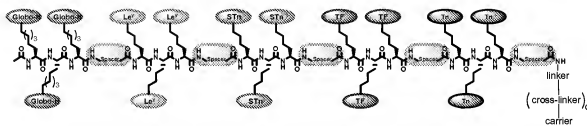
56. **(Withdrawn)** A method of inducing antibodies in a subject, wherein the antibodies are capable

of specifically binding with tumor cells, which comprises administering to the subject:

an amount of a clustered multi-antigenic construct of claim 1; wherein R is hydrogen; and wherein the amount of construct is effective to induce the antibodies.

57. **(Withdrawn)** The method of claim 56, wherein the method further comprises administering an immunogenic carrier.

58. **(Withdrawn)** The method of claim 48, 54 or 56, wherein the clustered multi-antigenic construct has the structure:



wherein q is 0 or 1; the spacer, for each occurrence, is independently a substituted or unsubstituted C_{1-6} alkylidene or C_{2-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO_2 , COCO, $CONR^{Z1}$, $OCONR^{Z1}$, $NR^{Z1}NR^{Z2}$, $NR^{Z1}NR^{Z2}CO$, $NR^{Z1}CO$, $NR^{Z1}CO_2$, $NR^{Z1}CONR^{Z2}$, SO, SO_2 , $NR^{Z1}SO_2$, SO_2NR^{Z1} , $NR^{Z1}SO_2NR^{Z2}$, O, S, or NR^{Z1} , wherein each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl or acyl; a peptidyl moiety or a bivalent aryl or heteroaryl moiety; the linker is either a free carboxylic acid, -O-, (carboxamido)alkyl carboxamide, MBS, primary carboxamide, mono- or dialkyl carboxamide, mono- or diarylcarboxamide, linear or branched chain (carboxy)alkyl carboxamide, linear or branched chain (alkoxycarbonyl)alkyl-carboxamide, linear or branched chain (carboxy)arylalkylcarboxamide, linear or branched chain (alkoxycarbonyl)alkylcarboxamide, an oligoester fragment comprising from 2 to about 20 hydroxy acyl residues, a peptidic fragment comprising from 2 to about 20 amino acyl residues, or a linear or branched chain alkyl or aryl carboxylic ester; and the carrier is an immunogenic carrier.